

REMARKS

Claims 1 and 3-24 are in the application.

§ 103 Rejections

In the Office Action, claims 4-24 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent 6,324,184 to Hou *et al.*, hereinafter “Hou” in view of U.S. Patent 6,473,793 to Dillon *et al.*, hereinafter “Dillon”; and claims 1 and 3 were rejected under 35 U.S.C. § 103 as being unpatentable over Hou in view of Dillon and U.S. Patent 6,101,176 to Honkasalo *et al.*, hereinafter “Honkasalo”.

Brief Description of Additional Cited References

Dillon describes a system for retrieving data from a source computer coupled to a Transmission Control Protocol/Internet Protocol (TCP/IP) network. The system employs a hybrid gateway which controls the rate at which terminals (users) receive data requested from the source computer. Specifically, a terminal issues a request to the source computer to receive data. The request specifies a rate at which the terminal wishes to receive the data from the source computer. The hybrid gateway intercepts the request and may change the specified rate depending on a status (state) associated with the terminal. The request is then forwarded to the source computer which transfers the requested data at the rate specified in the request. See Dillon, column 2, lines 5-11.

In Dillon, a terminal’s status may be either exempt or non-exempt. An exempt terminal is one that is exempted from being throttled by the hybrid gateway. A non-exempt terminal, on the other hand, is one that may be throttled by the hybrid gateway. A terminal’s status is changed from exempt to non-exempt if the terminal’s historical throughput rate exceeds certain high limit thresholds. Likewise, a terminal’s status is changed from exempt to non-exempt if for a period of time, the terminal’s historical throughput is below a certain threshold, meaning the terminal historically uses a low amount of bandwidth. The hybrid gateway throttles a non-exempt terminal by changing an amount or resources requested by the terminal in a request to an

amount that is less than the amount requested. See Dillon column 16, lines 19-24, column 16 line 59 to column 17, line 64 and Fig. 14.

Differences Between the Claimed Invention and the Cited Art

Representative claim 4 recites:

4. A method for providing multiple grades of service in a demand access wireless communication system, comprising:
- identifying a priority level of a user requesting allocation of bandwidth for transmitting data information to a base station depending on whether a previous historical usage of resources by that user exceeds a predetermined threshold, such that:
 - if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a higher priority level is assigned, and***
 - if the previous historical usage by the user is lower than the threshold, the user is assigned a higher priority level for transmitting data information, the higher priority level entitling the user use of more channels than otherwise allowed when a lower priority level is assigned; and
 - allocating bandwidth to the user depending upon the corresponding priority level so identified.

The Applicant respectfully submits that Hou, Dillon and Honkasalo taken either singly or in combination do not teach or suggest the Applicants' claimed ***if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a higher priority level is assigned.***

In the Office Action, the Examiner notes that Hou does not expressly disclose assigning a user a lower priority level for transmitting data information if the previous historical usage by the user is higher than a threshold. The Applicant agrees.

As noted in the Applicant's previous response Honkasalo does not disclose this claimed aspect of the Applicant's invention.

With regards to Dillon, Dillon teaches assigning a non-exempt status to a user with high historical bandwidth usage to cause the user's transmission rate to be throttled. Specifically, in Dillon a user with high historical usage is assigned a non-exempt status. This non-exempt status causes a hybrid gateway to throttle requests for bandwidth issued by the user by changing a rate

specified in the request to an amount that is less than the specified rate. Likewise, if the user's status is "exempt" then the hybrid gateway does not change the amount of bandwidth requested by the user in the request but rather allows the request to go through "as is" and allow the user to be granted the amount of bandwidth specified in the request. In sum, the technique taught by Dillon, grants a user its requested bandwidth or less than its requested bandwidth based on the user's status. Thus, Dillon's technique assigns resources on the basis of status and not priority levels.

The Applicant, on the other hand, clearly claims (1) identifying a priority level of a user based on a historical usage of resources by the user and (2) entitling the user to resources based on the identified priority level. The priority level indicates whether a user is entitled to more channels or fewer channels relative to a priority level. Users that exceed a threshold are assigned a lower priority and consequently given fewer resources than if they were assigned a higher priority. Users that fall below a threshold are assigned a higher priority and consequently given more resources than if they were assigned a lower priority. Dillon does not teach this. Rather, Dillon merely teaches changing the amount of resources requested by a user based on the user's status. Dillon makes no mention of priority levels with respect to entitling a user to resources because Dillon does not use prioritization to determine the amount of resources that should be granted to a user. Rather, as discussed above, Dillon uses a status associated with the user to determine if the user is granted all or some of the resources the user has requested. This scheme certainly does not involve identifying a priority of a user and entitling the user to resources based on the identified priority level as is clearly recited in the Applicant's claims.

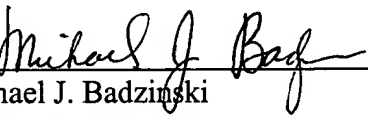
For reasons set forth above, the Applicant respectfully submits that Hou, Dillon and Honkasalo taken either individually or in combination do not teach the Applicants' claimed *if the previous historical usage by the user is higher than the threshold, the user is assigned a lower priority level for transmitting data information, the lower priority level entitling the user to use of fewer channels than otherwise allowed when a higher priority level is assigned*. Therefore, the Applicant respectfully requests that the above rejections to claims 1 and 3-24 be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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